

**WHAT IS CLAIMED IS:**

1. An inferred relation weighting process for determining the strength of an inferred  
2 relation between a first and a second Internet object, which are not directly linked,  
3 comprising:

4 a first link weighting process for determining the strength of at least a first  
5 link between said first non-directly linked Internet object and a common object;

6 a second link weighting process for determining the strength of at least a  
7 second link between said second non-directly linked Internet object and said common  
8 object; and

9 an inferred relation weight calculation process for calculating the strength of  
10 said inferred relation based on the strength of said at least a first link and said at least  
11 a second link.

1. The inferred relation weighting process of claim 1 wherein said common object  
2 comprises a plurality of discrete Internet objects, each interconnected with a discrete link,  
3 and said plurality of discrete Internet objects and links connect said first and second links,  
4 wherein said inferred relation weighting process further comprises an intermediate link  
5 weighting process for determining the strength of each said discrete link, wherein the  
6 strength of said inferred relation is based on the strength of each said discrete link and the  
7 strength of said at least a first link and said at least a second link.

1. 3. The inferred relation weighting process of claim 1 wherein said common object  
2 includes at least one Internet query.

1. 4. The inferred relation weighting process of claim 1 wherein said common object  
2 includes at least one Internet document.

1. 5. The inferred relation weighting process of claim 2 further comprising a link limitation  
2 process for specifying a link limit concerning the maximum number of links allowed to  
3 connect said first and second non-directly linked Internet objects.

1       6.     The inferred relation weighting process of claim 2 further comprising an incoming  
2 link analysis process for determining the number of objects linked to each of said plurality of  
3 Internet objects, wherein the incoming link value of each said Internet object is directly  
4 proportional to the number of objects linked to that Internet object.

1       7.     The inferred relation weighting process of claim 2 further comprising an outgoing  
2 link analysis process for determining the number of objects that each of said plurality of  
3 Internet objects is linked to, wherein the outgoing link value of each said Internet object is  
4 directly proportional to the number of objects that said Internet object is linked to.

1       8.     The inferred relation weighting process of claim 2 wherein said inferred relation  
2 weight calculation process includes a known relation recalculation process for redefining the  
3 values of the strength of each said discrete link and the strength of said at least a first link and  
4 said at least a second link in response to the calculation of said strength of said inferred  
5 relation.

1       9.     The inferred relation weighting process of claim 1 wherein at least one of said  
2 Internet objects is a transaction record.

1       10.    The inferred relation weighting process of claim 1 wherein at least one of said  
2 Internet objects is an Internet query.

1       11.    The inferred relation weighting process of claim 1 wherein at least one of said  
2 Internet objects is an Internet document.

1       12.    The inferred relation weighting process of claim 1 wherein said strength of said  
2 inferred relation is a relevance score.

1       13.    The inferred relation weighting process of claim 9 wherein said relevance score is a  
2 percentage.

T007207 T202005160

1       14. An inferred relation weighting process for determining the strength of an inferred  
2       relation between a first and a second Internet object, which are not directly linked,  
3       comprising:

4                 a first link weighting process for determining the strength of at least a first  
5       link between said first non-directly linked Internet object and a plurality of common  
6       objects;

7                 a second link weighting process for determining the strength of at least a  
8       second link between said second non-directly linked Internet object and said plurality  
9       of common objects; wherein said plurality of common objects comprises a first  
10      common object connected to said first link; a second common object connected to  
11      said second link, and an intermediate link interconnecting said first and second  
12      common objects;

13                 an intermediate link weighting process for determining the strength of said  
14      intermediate link; and

15                 an inferred relation weight calculation process for calculating the strength of  
16      said inferred relation based on the strength of said at least a first link, said at least a  
17      second link, and said intermediate link.

1       15. The inferred relation weighting process of claim 14 further comprising a link  
2       limitation process for specifying a link limit concerning the maximum number of links  
3       allowed to connect said first and second non-directly linked Internet objects.

1       16. The inferred relation weighting process of claim 14 wherein said plurality of common  
2       objects includes at least one Internet document.

1       17. The inferred relation weighting process of claim 14 wherein said intermediate link  
2       comprises at least one additional common object and a plurality of sub-links for connecting  
3       said at least one additional common object to said first and second common objects, wherein  
4       said intermediate link weighting process determines the strength of said intermediate link  
5       based on the individual strengths of said sub-links.

1       18. The inferred relation weighting process of claim 17 further comprising an incoming  
2 link analysis process for determining the number of objects linked to each of said plurality of  
3 Internet objects and each said common object, wherein the incoming link value of each said  
4 Internet object and each said common object is directly proportional to the number of objects  
5 linked to that object.

1       19. The inferred relation weighting process of claim 17 further comprising an outgoing  
2 link analysis process for determining the number of objects that each of said plurality of  
3 Internet objects and each said common object is linked to, wherein the outgoing link value of  
4 each said Internet object and each said common object is directly proportional to the number  
5 of objects that said object is linked to.

1       20. The inferred relation weighting process of claim 17 wherein said inferred relation  
2 weight calculation process includes a known relation recalculation process for redefining the  
3 values of the strength of each said sub-link and the strength of said at least a first link and  
4 said at least a second link in response to the calculation of said strength of said inferred  
5 relation.

1       21. The inferred relation weighting process of claim 14 wherein at least one of said  
2 Internet objects is a transaction record.

1       22. The inferred relation weighting process of claim 14 wherein at least one of said  
2 Internet objects is an Internet query.

1       23. The inferred relation weighting process of claim 14 wherein at least one of said  
2 Internet objects is an Internet document.

1       24. The inferred relation weighting process of claim 14 wherein said strength of said  
2 inferred relation is a relevance score.

F&R Docket No.: 10984-540001

1       25.     The inferred relation weighting process of claim 24 wherein said relevance score is a  
2     percentage.

1       26.     A method for determining the strength of an inferred relation between a first and a  
2     second Internet object, which are not directly linked, comprising:

3                 determining the strength of at least a first link between the first non-directly  
4     linked Internet object and a common object;

5                 determining the strength of at least a second link between the second non-  
6     directly linked Internet object and the common object; and

7                 calculating the strength of the inferred relation based on the strength of the at  
8     least a first link and the at least a second link.

1       27.     The method for determining the strength of an inferred relation of claim 26 wherein  
2     the common object comprises a plurality of discrete Internet objects, each interconnected  
3     with a discrete link, and the plurality of discrete Internet objects and links connect the first  
4     and second links, wherein determining the strength of the inferred relation further comprises  
5     determining the strength of each discrete link, wherein the strength of the inferred relation is  
6     based on the strength of each discrete link and the strength of the at least a first link and the  
7     at least a second link.

1       28.     The method for determining the strength of an inferred relation of claim 27 further  
2     comprising specifying a link limit concerning the maximum number of links allowed to  
3     connect the first and second non-directly linked Internet objects.

1       29. A computer program product residing on a computer readable medium having a  
2       plurality of instructions stored thereon which, when executed by the processor, cause that  
3       processor to:

4              determine the strength of at least a first link between the first non-directly  
5              linked Internet object and a common object;

6              determine the strength of at least a second link between the second non-  
7              directly linked Internet object and the common object; and

8              calculate the strength of the inferred relation based on the strength of the at  
9              least a first link and the at least a second link.

1       30. The computer program product of claim 29 wherein said computer readable medium  
2       is a random access memory (RAM).

1       31. The computer program product of claim 29 wherein said computer readable medium  
2       is a read only memory (ROM).

1       32. The computer program product of claim 29 wherein said computer readable medium  
2       is a hard disk drive.

1       33. A processor and memory configured to:

2              determine the strength of at least a first link between the first non-directly  
3              linked Internet object and a common object;

4              determine the strength of at least a second link between the second non-  
5              directly linked Internet object and the common object; and

6              calculate the strength of the inferred relation based on the strength of the at  
7              least a first link and the at least a second link.

1       34. The processor and memory of claim 33 wherein said processor and memory are  
2       incorporated into a personal computer.

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1       35.     The processor and memory of claim 33 wherein said processor and memory are  
2     incorporated into a network server.

1       36.     The processor and memory of claim 33 wherein said processor and memory are  
2     incorporated into a single board computer.